Claims:

This listing of the claims will replace all prior versions and listings of claims in the application:

1-28 (Cancelled).

29. (Currently amended) A method for correlating a first packet of feature waveforms from an unknown source with a second packet of feature waveforms form a known source in order to associate a known source with the first packet of feature waveforms, comprising the steps of:

(A) determining at least first, second and third correlation values (cv_1, cv_2, cv_3) by correlating features from the first and second packets, wherein the first correlation value (cv_1) is determined by correlating features associated with a first frequency band from the first and second packets, the second correlation value (cv_2) is determined by correlating features associated with a second frequency band from the first and second packets, and the third correlation value (cv_3) is determined by correlating features associated with a third frequency band from the first and second packets;

(B) computing a first weighting value in accordance with the features from the second packet associated with the first frequency band, a second weighting value in accordance with the features from the second packet associated with the second frequency band, and a third weighting value in accordance with the features from second packet associated with the third frequency band;

(C) computing a weighted Euclidean distance value (D_w) representative of differences between the first and second packets from the first, second and third correlation values and the first, second and third weighting values; and

(D) associating the first frequency packet with the known source in

accordance with the weighted Euclidean distance value (D_w);

wherein the first weighting value corresponds to a standard deviation (std_1) of the features from the second packet associated with the first frequency band, the second weighting value corresponds to a standard deviation (std_2) of the features from the second packet associated with the second frequency band, and the third weighting value corresponds to a standard deviation (std_3) of the features from the second packet associated with the third frequency band;

~~The method of claim 28,~~ wherein the weighted Euclidean distance value (D_w) is determined in accordance with the following equation:

$$Dw=[((std_1)*(1-cv_1))^2+((std_2)*(1-cv_2))^2+((std_3)*(1-cv_3))^2]^{1/2}/[(std_1)^2+(std_2)^2+(std_3)^2]^{1/2}$$

30. (Cancelled)

31. (Allowed) A method for correlating a packet of feature waveforms from an unknown source with a packet of feature waveforms from a known source in order to associate a known source with the packet of feature waveforms from the unknown source, comprising the steps of:

(A) determining at least first, second and third correlation values by correlating features from first and second packets, wherein the first correlation value is determined by correlating features associated with a first frequency band from the first and second packets, the second correlation value is determined by correlating features associated with a second frequency band from the first and second packets, and the third correlation value is determined by correlating features associated with a third frequency band from the first and second packets;

(B) computing a Euclidean distance value (D(n-1)) representative of

differences between the first and second packets from the first, second and third correlation values;

(C) determining at least fourth, fifth and sixth correlation values by correlating features from third and fourth packets, wherein the fourth correlation value is determined by correlating features associated with the first frequency band from the third and fourth packets, the fifth correlation value is determined by correlating features associated with the second frequency band from the third and fourth packets, and the sixth correlation value is determined by correlating features associated with the third frequency band from the third and fourth packets;

(D) computing a Euclidean distance value (D(n)) representative of differences between the third and fourth packets from the fourth, fifth and sixth correlation values;

(E) updating the Euclidean distance value (D(n)) using the Euclidean distance value (D(n-1)); and

(F) associating the third packet with the known source in accordance with the updated Euclidean distance value (D(n)).

32. (Allowed) The method of claim 31, wherein the second and fourth packets are known a priori to represent signals broadcast from the known source.

33. (Allowed) The method of claim 32, wherein the third packet is positioned immediately after the first packet in a sequence of packets of feature waveforms.

34. (Allowed) The method of claim 33, wherein the fourth packet is positioned immediately after the second packet in a sequence of packets of feature waveforms.

35. (Allowed) The method of claim 34, wherein the updated the Euclidean distance value (D(n)) is determined in step (E) in accordance with the following equation:

$$\mathbf{D}(n)=k*\mathbf{D}(n-1)+(1-k)*D(n)$$

where k is a coefficient that is less than 1.

36. (Allowed) The method of claim 31, wherein step (F) comprises:

(F) associating the third frequency packet with the known source if the updated Euclidean distance value (D(n)) is less than a threshold.